FIG. 1

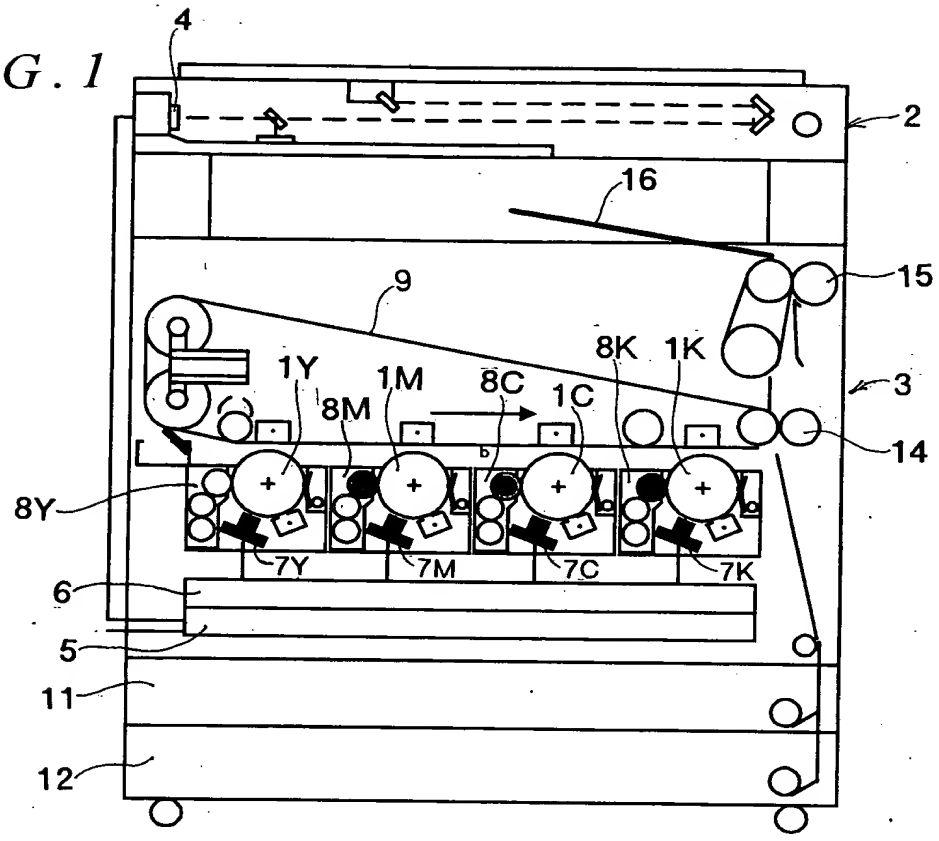

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FIG.2

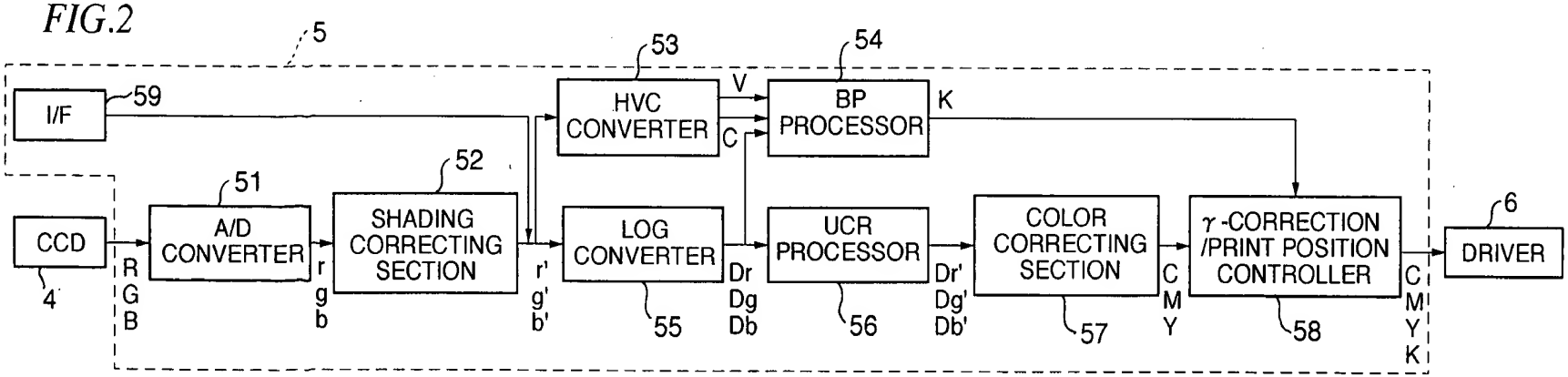


FIG. 3

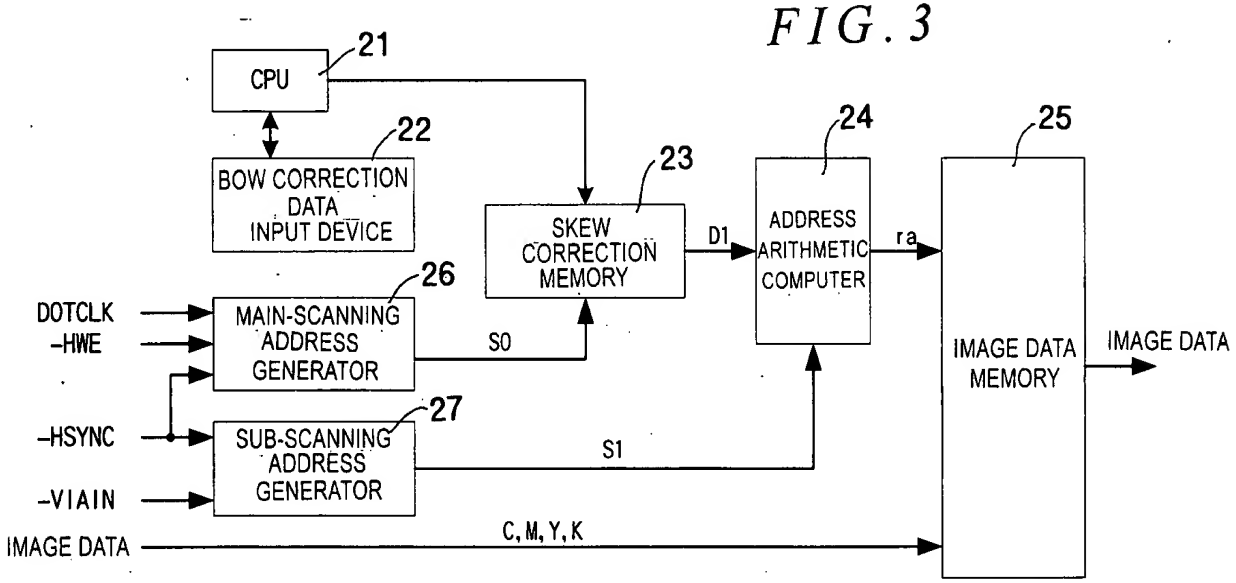

21
CPU
22
BOW CORRECTION DATA INPUT DEVICE
23
SKEW CORRECTION MEMORY
24
ADDRESS ARITHMETIC COMPUTER
25
IMAGE DATA MEMORY
IMAGE DATA
D1
ra
26
DOTCLK
-HWE
MAIN-SCANNING ADDRESS GENERATOR
S0
27
-HSYNC
SUB-SCANNING ADDRESS GENERATOR
S1
-VIAIN
IMAGE DATA
C, M, Y, K

FIG. 4

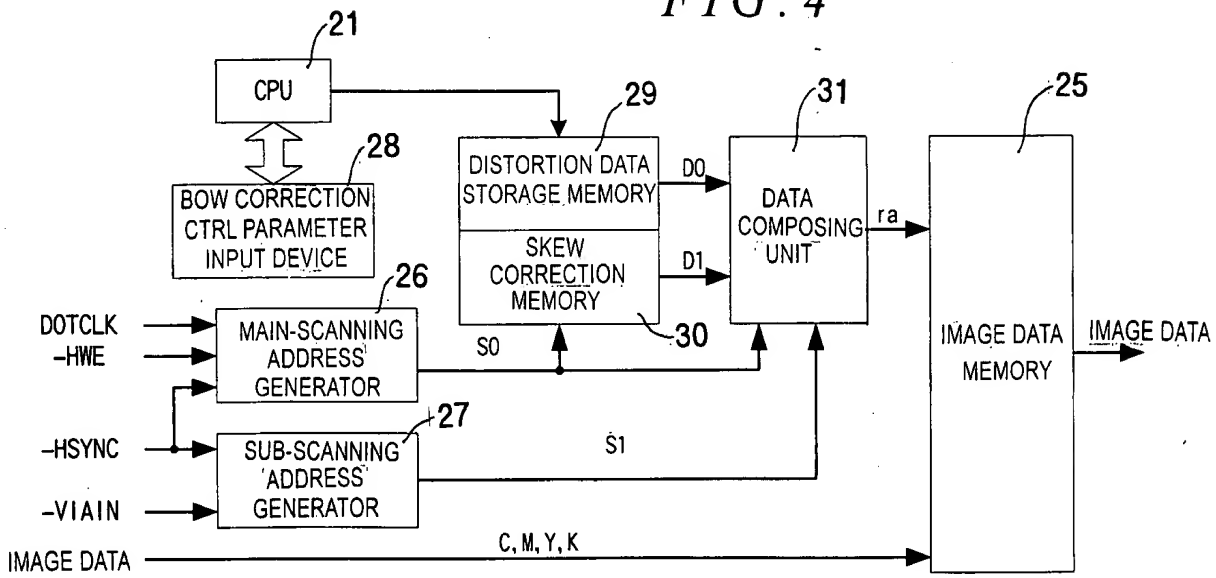
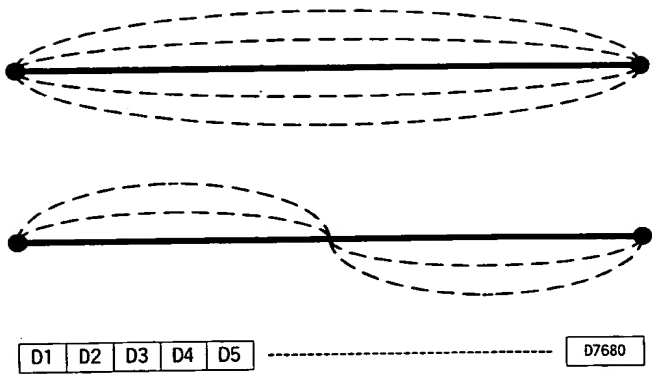

21
CPU
29
DISTORTION DATA STORAGE MEMORY
31
25
28
BOW CORRECTION CTRL PARAMETER INPUT DEVICE
D0
DATA COMPOSING UNIT
ra
SKEW CORRECTION MEMORY
D1
30
26
DOTCLK
-HWE
MAIN-SCANNING ADDRESS GENERATOR
S0
IMAGE DATA MEMORY
IMAGE DATA
27
-HSYNC
SUB-SCANNING ADDRESS GENERATOR
S1
-VIAIN
IMAGE DATA
C, M, Y, K

FIG. 5



BOW CORRECTION DATA

FIG. 6

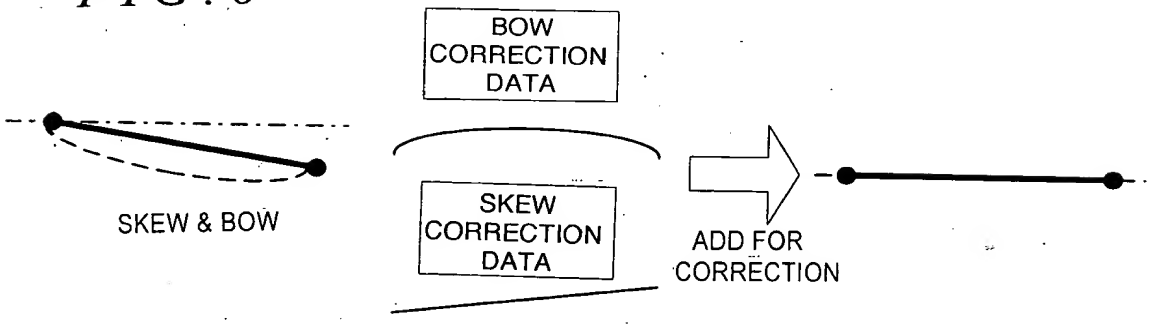


FIG.7

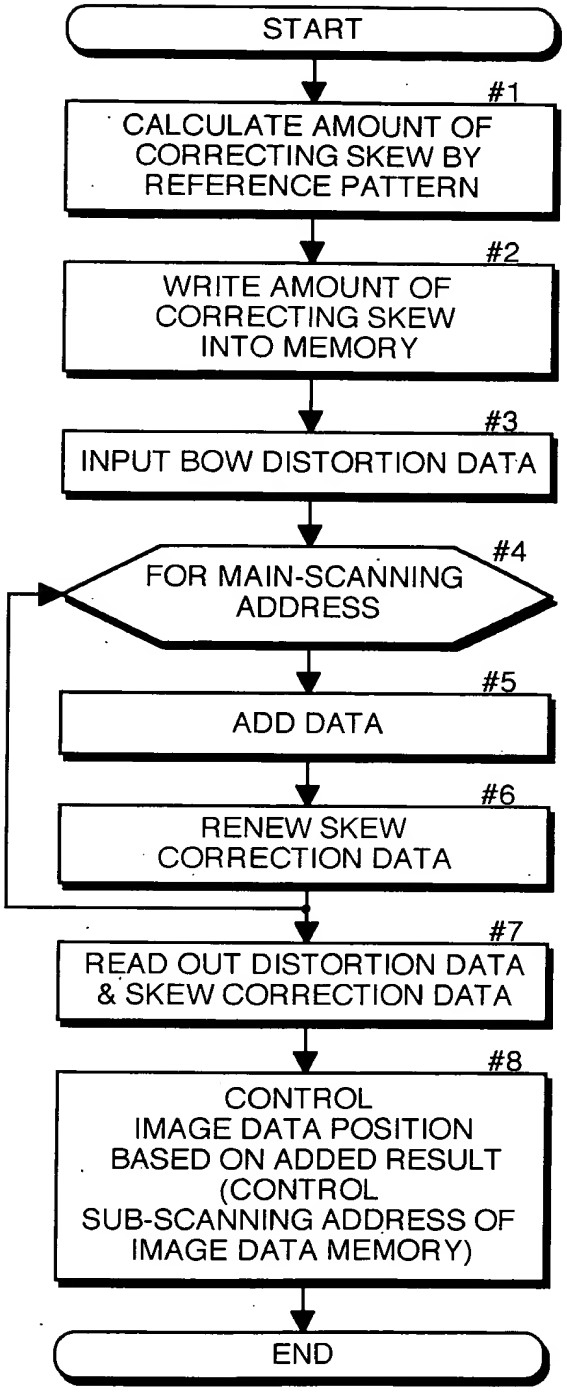


FIG.8

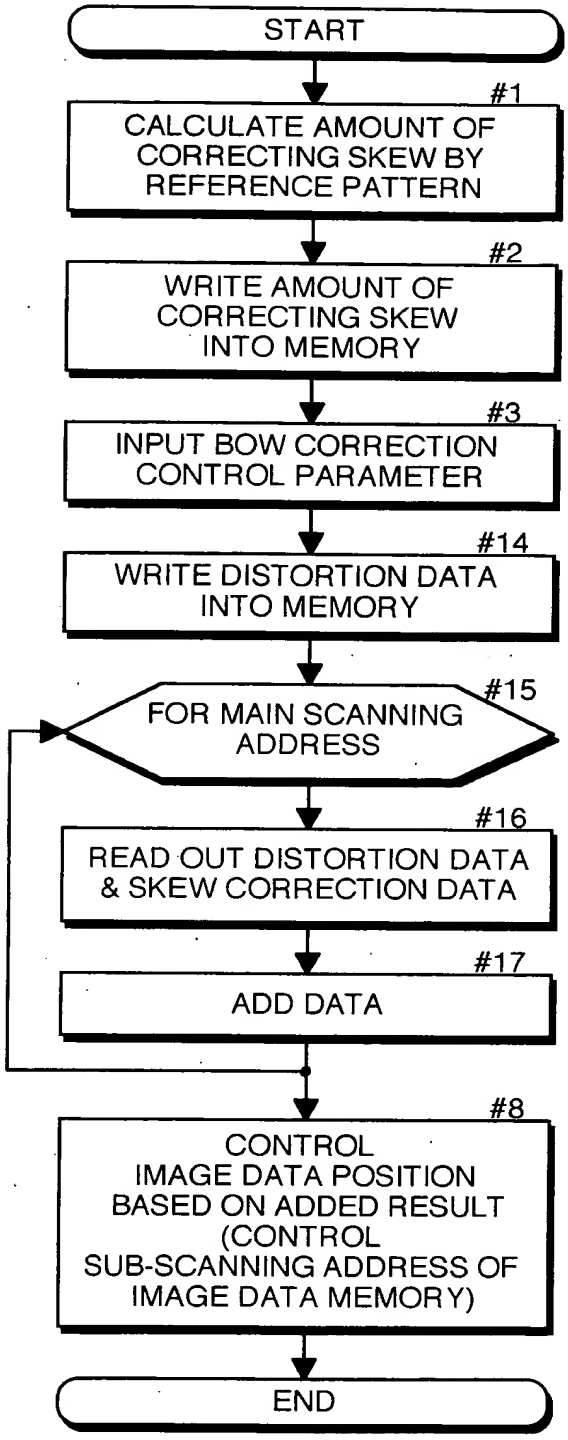


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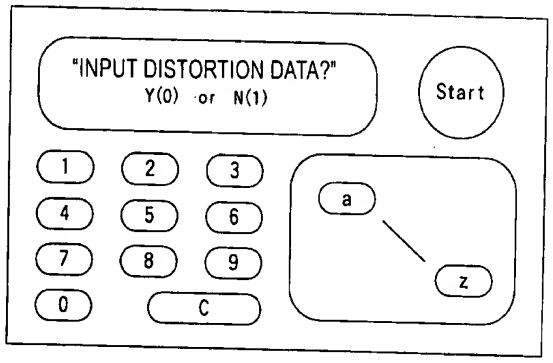
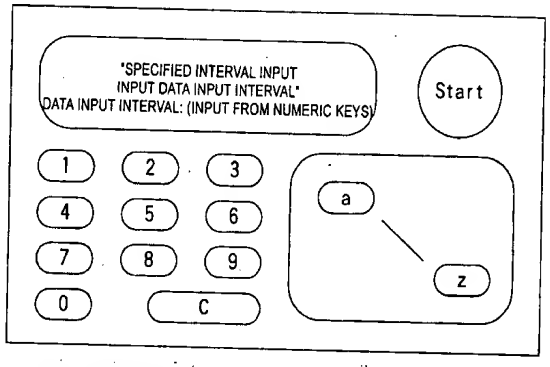
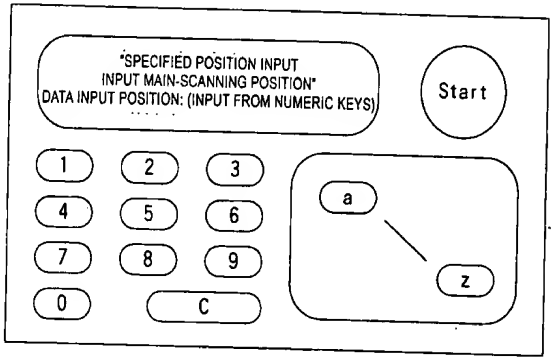
FIG. 9 DISTORTION DATA INPUT PANEL



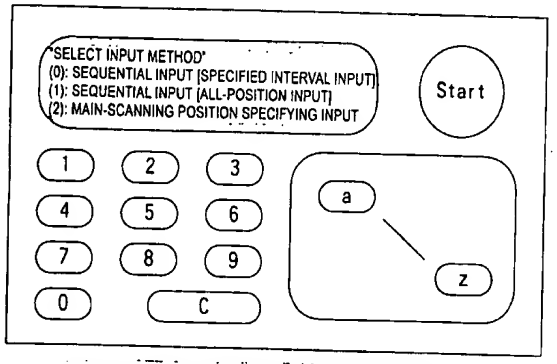
[A: DISTORTION DATA INPUT SCREEN]



[C: DISTORTION DATA INPUT INTERVAL SCREEN]
HEREAFTER, GO TO D

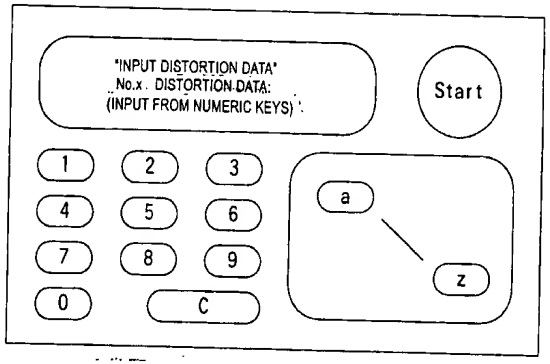


[E: SPECIFIED POSITION INPUT SCREEN]
HEREAFTER, GO TO D

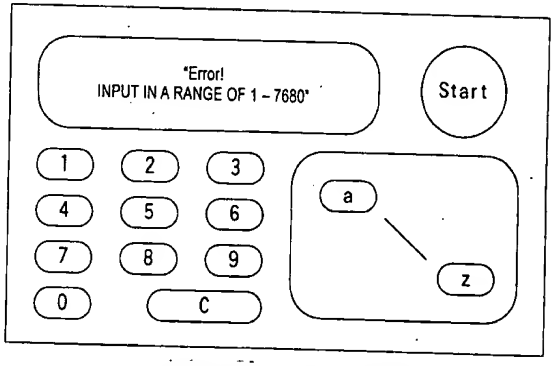


[B: INPUT METHOD SELECTING SCREEN]

(0) → TO C
(1) → TO D
(2) → TO E



[D: DISTORTION DATA INPUT SCREEN]



[F: EXAMPLE OF INPUT ERROR]

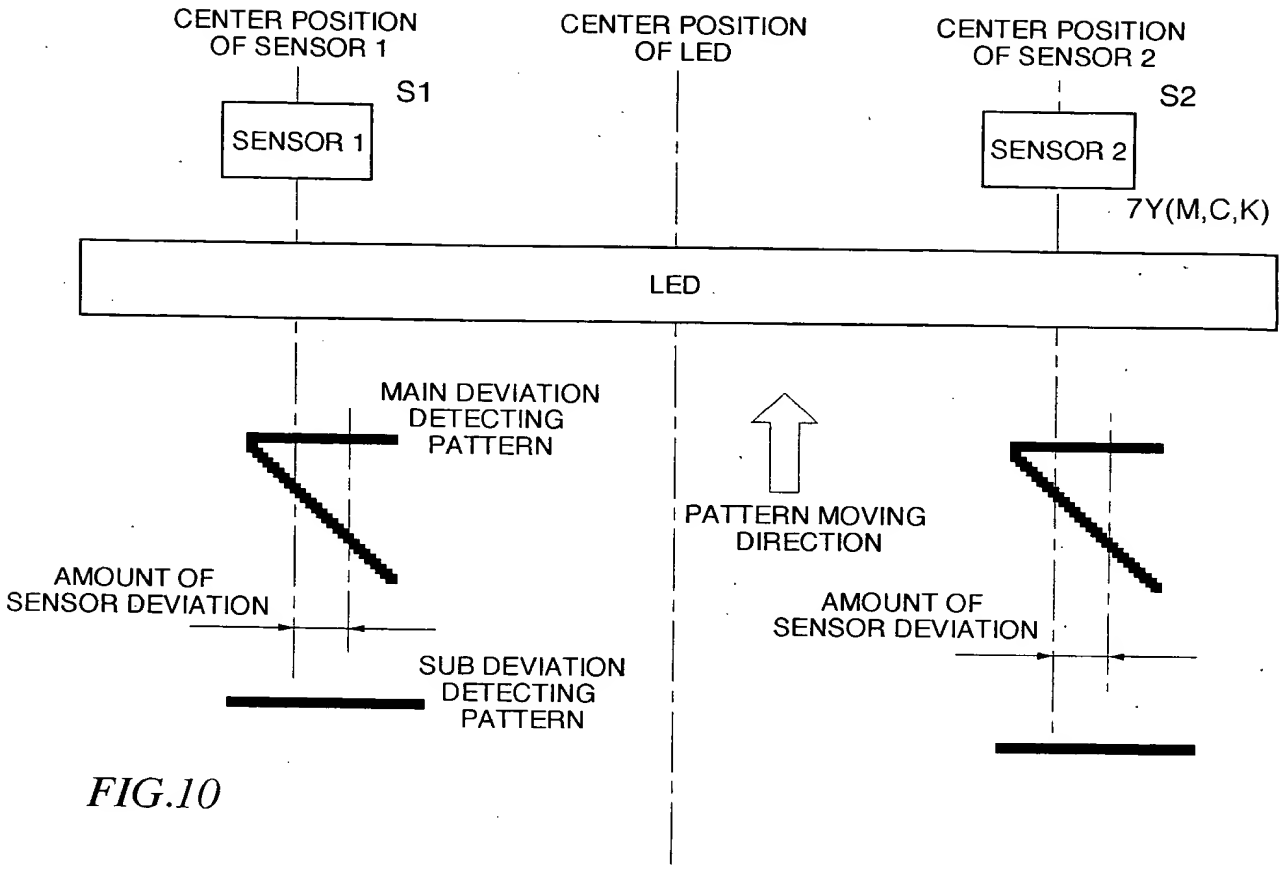

CENTER POSITION OF SENSOR 1
S1
SENSOR 1
CENTER POSITION OF LED
CENTER POSITION OF SENSOR 2
S2
SENSOR 2
7Y(M,C,K)
LED
MAIN DEVIATION DETECTING PATTERN
AMOUNT OF SENSOR DEVIATION
SUB DEVIATION DETECTING PATTERN
PATTERN MOVING DIRECTION
AMOUNT OF SENSOR DEVIATION

FIG.10

FIG.11

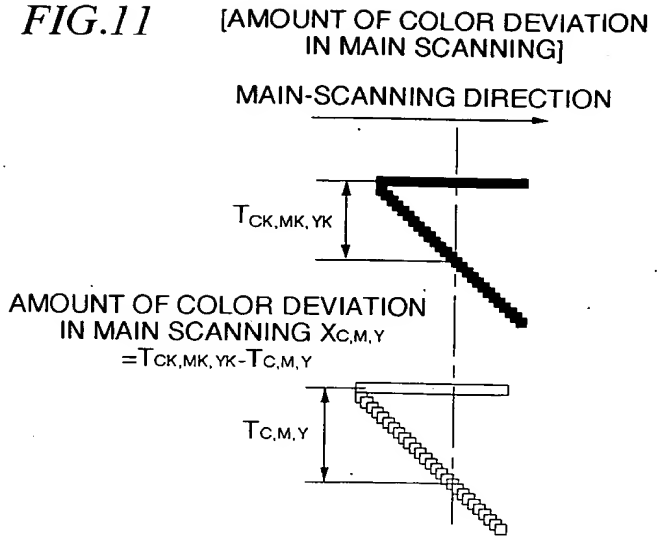


FIG.12

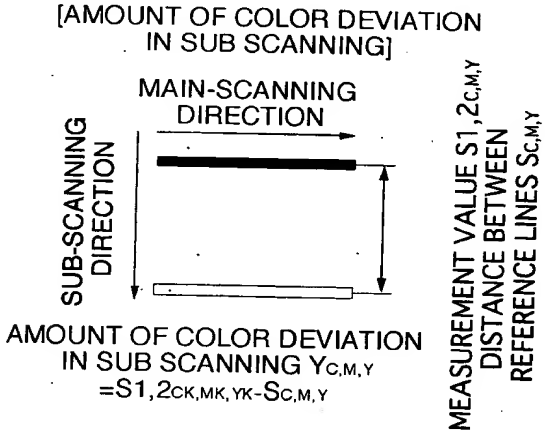


FIG.13

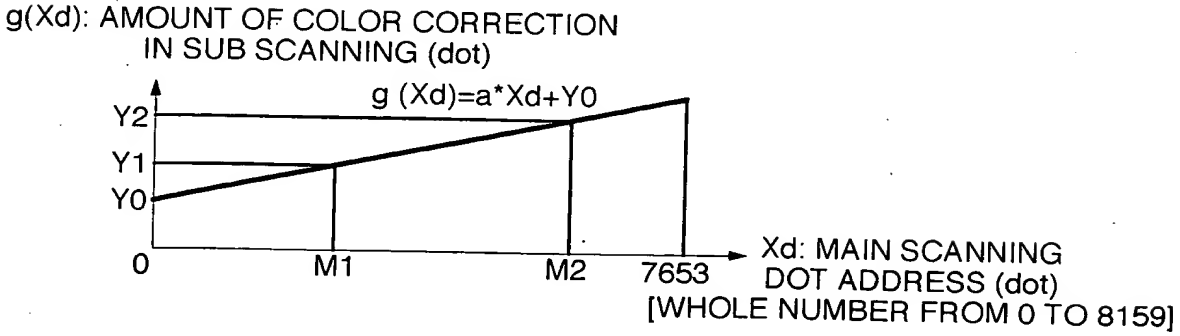


FIG.14

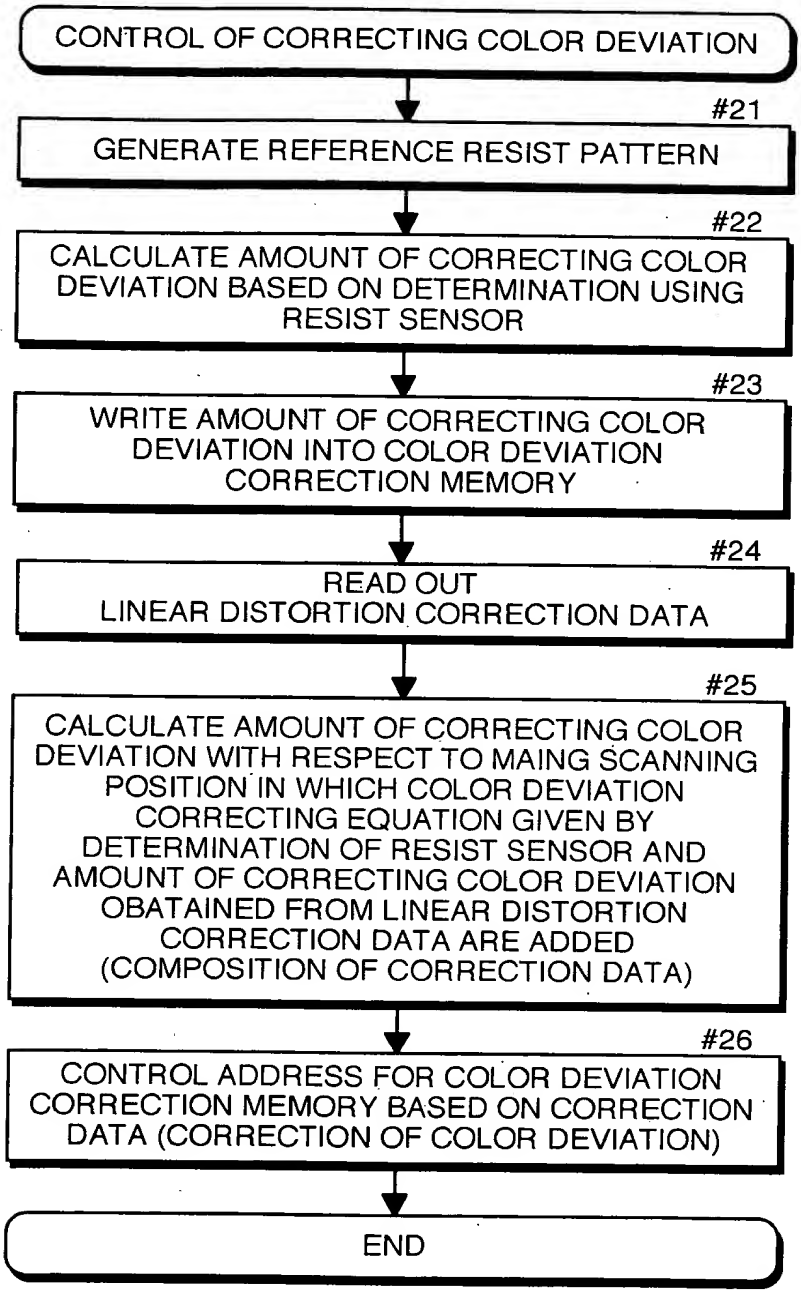


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FIG.15

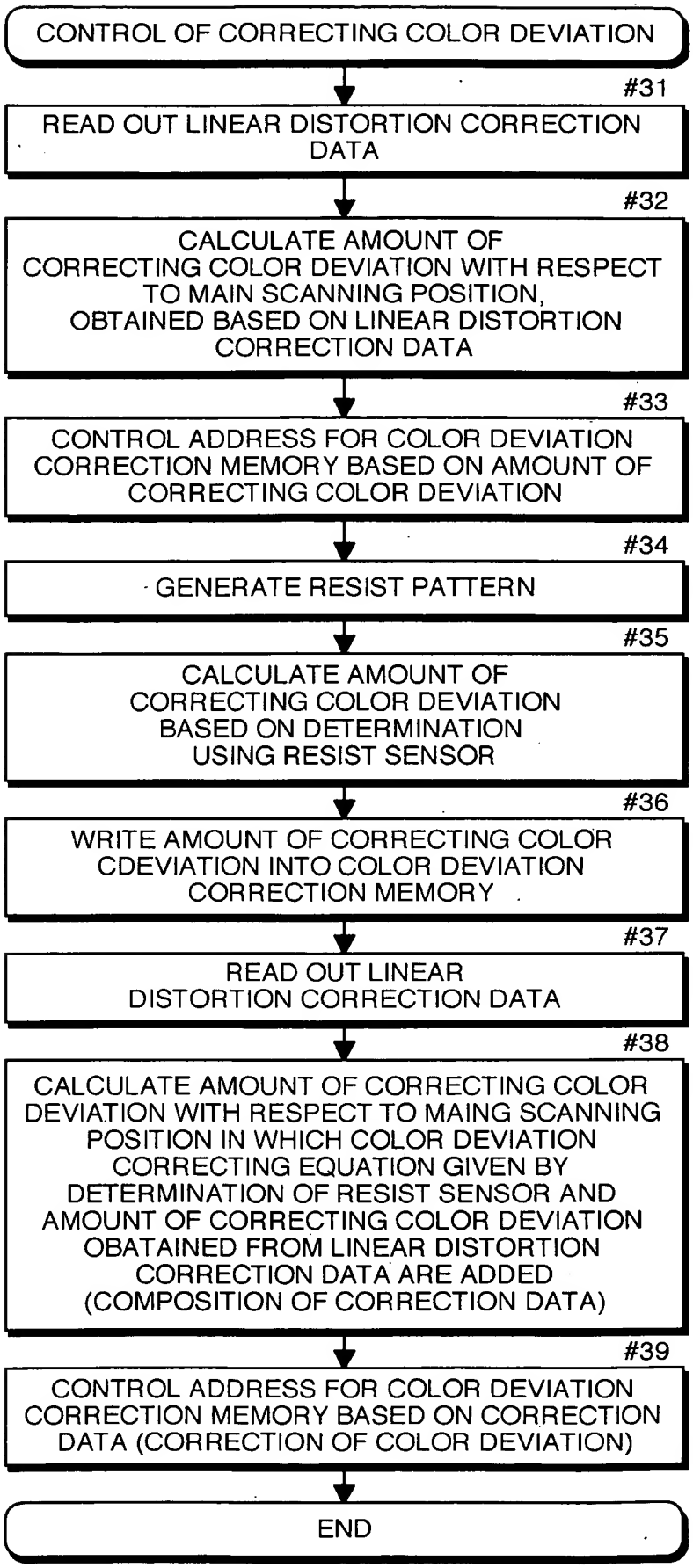

CONTROL OF CORRECTING COLOR DEVIATION
#31
READ OUT LINEAR DISTORTION CORRECTION DATA
#32
CALCULATE AMOUNT OF CORRECTING COLOR DEVIATION WITH RESPECT TO MAIN SCANNING POSITION, OBTAINED BASED ON LINEAR DISTORTION CORRECTION DATA
#33
CONTROL ADDRESS FOR COLOR DEVIATION CORRECTION MEMORY BASED ON AMOUNT OF CORRECTING COLOR DEVIATION
#34
GENERATE RESIST PATTERN
#35
CALCULATE AMOUNT OF CORRECTING COLOR DEVIATION BASED ON DETERMINATION USING RESIST SENSOR
#36
WRITE AMOUNT OF CORRECTING COLOR CDEVIATION INTO COLOR DEVIATION CORRECTION MEMORY
#37
READ OUT LINEAR DISTORTION CORRECTION DATA
#38
CALCULATE AMOUNT OF CORRECTING COLOR DEVIATION WITH RESPECT TO MAING SCANNING POSITION IN WHICH COLOR DEVIATION CORRECTING EQUATION GIVEN BY DETERMINATION OF RESIST SENSOR AND AMOUNT OF CORRECTING COLOR DEVIATION OBATAINED FROM LINEAR DISTORTION CORRECTION DATA ARE ADDED (COMPOSITION OF CORRECTION DATA)
#39
CONTROL ADDRESS FOR COLOR DEVIATION CORRECTION MEMORY BASED ON CORRECTION DATA (CORRECTION OF COLOR DEVIATION)
END

FIG. 16(a)

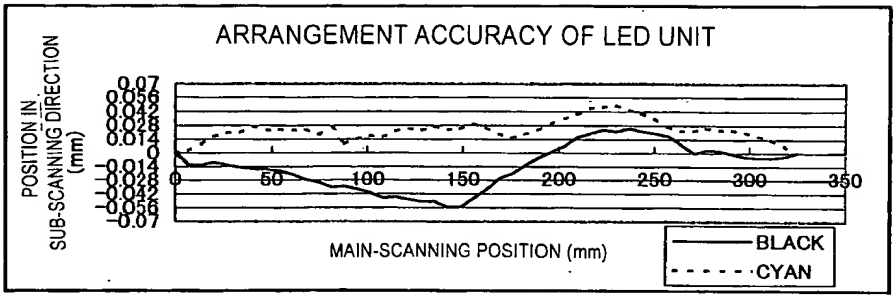


FIG. 16(b)

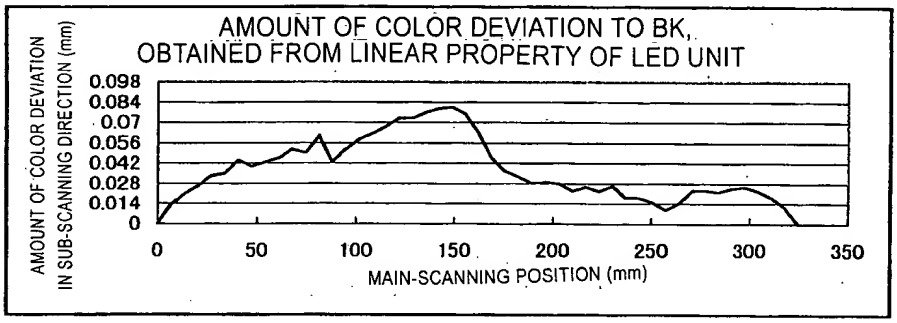


FIG. 16(c)

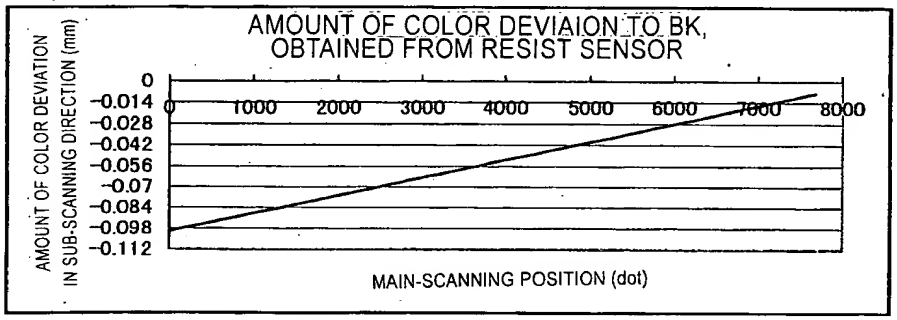


FIG. 16(d)

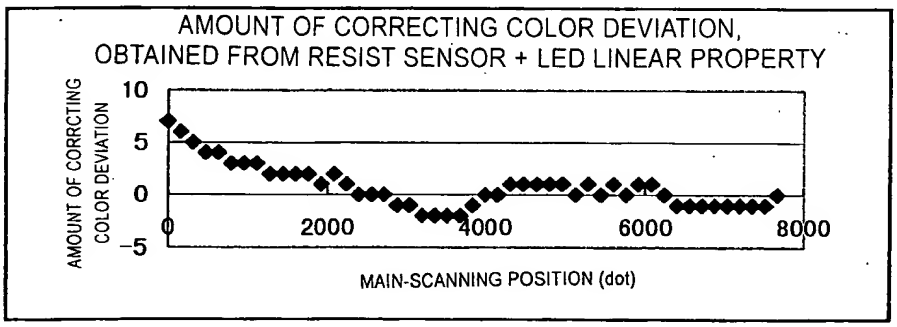


FIG. 17

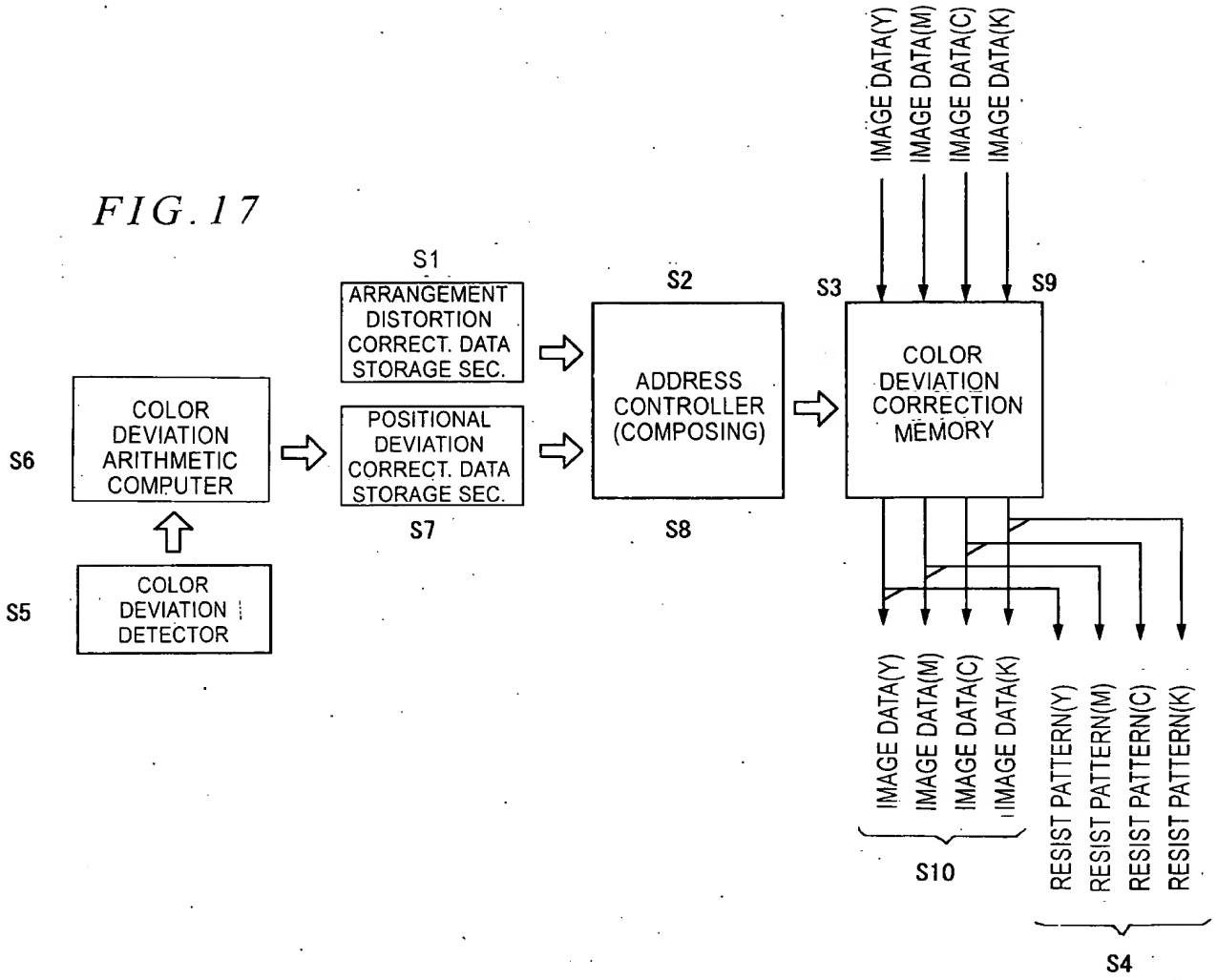


IMAGE DATA(Y)
IMAGE DATA(M)
IMAGE DATA(C)
IMAGE DATA(K)
S1
ARRANGEMENT DISTORTION CORRECT. DATA STORAGE SEC.
S2
S3
S9
ADDRESS CONTROLLER (COMPOSING)
COLOR DEVIATION CORRECTION MEMORY
S6
COLOR DEVIATION ARITHMETIC COMPUTER
POSITIONAL DEVIATION CORRECT. DATA STORAGE SEC.
S7
S8
S5
COLOR DEVIATION DETECTOR
IMAGE DATA(Y)
IMAGE DATA(M)
IMAGE DATA(C)
IMAGE DATA(K)
S10
RESIST PATTERN(Y)
RESIST PATTERN(M)
RESIST PATTERN(C)
RESIST PATTERN(K)
S4

FIG. 18
PRIOR ART

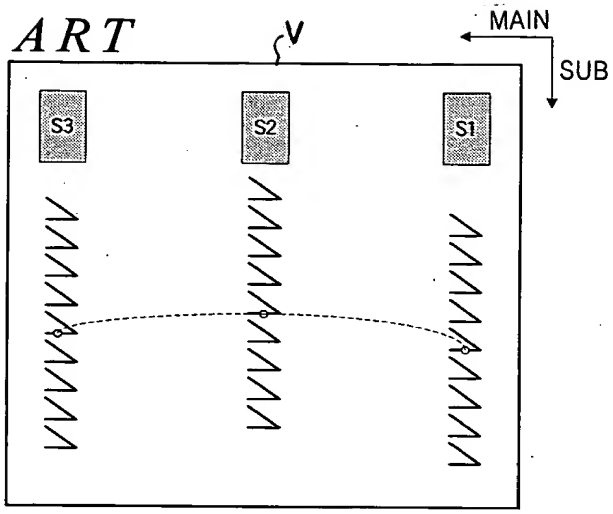
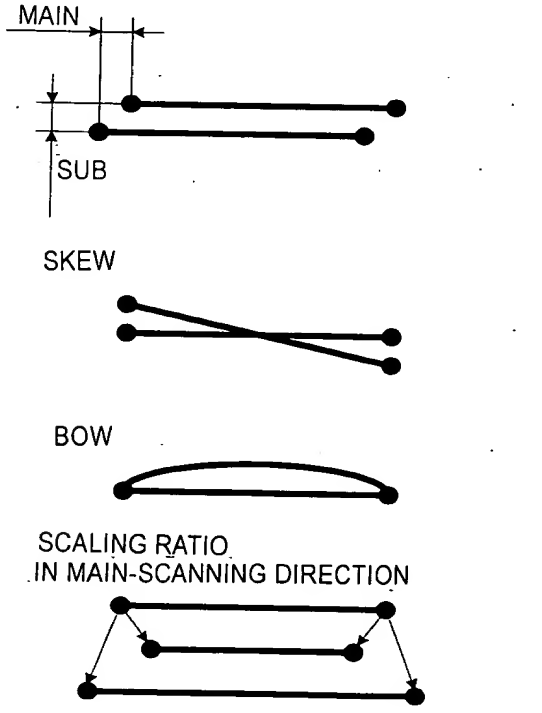


FIG. 19

ELEMENTS OF COLOR DEVIATION
-DEVIATION IN MAIN-SCANNING DIRECTION
-DEVIATION IN SUB-SCANNING DIRECTION
-ANGLE DEVIATION (SKEW)
-DEVIATION IN SCANNING LINE (BOW)
-SCALING RATIO IN MAIN-SCANNING DIRECTION



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